

EXHIBIT 10

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**IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE**

Patent Application

Inventor(s): Dat D. Ngo
Case: Ngo 1 (Our File: ALU/124986)
Serial No.: 10/448,559 **Group Art Unit:** 2613
Filed: 05/30/2003 **Confirmation #:** 4779
Examiner: Li, Shi K
Title: PROTECTION SWITCHING IN WDM RINGS USING A SHARED RING
SWITCH

**MAIL STOP APPEAL BRIEF-PATENTS
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Dear Sir or Madam:

REPLY BRIEF

Appellant submits this Reply Brief to the Board of Patent Appeals and Interferences in response to the Examiner's Answer, dated July 2, 2009, in the Appeal of the above-identified application.

The Commissioner is authorized to charge any fees due, including extension of time and excess claim fees, to counsel's Deposit Account No. 50-4802/ALU/124986.

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REMARKS

Appellant's response to the Examiner's Answer is provided hereinbelow. Appellant notes that references herein to Appellant's Appeal Brief are references to the Amended Appeal Brief filed on April 13, 2009.

Section 10 (Response to Arguments)

In Section 10 (Response to Arguments) of the Examiner's Answer, the Examiner provides answers to the arguments made by the Appellant in the Appeal Brief filed for the above-identified application. The Examiner's answers to Appellant's arguments are addressed below (where sub-sections identify the portions of the Examiner's Answer to which the Appellant is responding).

Response to Examiner's Arguments: Claims 1 – 2 (Pgs. 8 – 19 of Examiner's Answer)

In responding to Appellant's arguments regarding claims 1 and 2, the Examiner makes additional arguments and remarks. The Examiner's arguments and remarks are addressed in turn hereinbelow.

Examiner's Claim Mapping Table (Examiner's Answer, Pgs. 8-9)

In the Claim Mapping Table, the Examiner attempts to map the teachings of Vieregge to the limitations of Appellant's claim 1.

In the Final Office Action, the Examiner primarily relied upon Col. 5, Lines 49 – 64 of Vieregge as support for the rejection of Appellant's claim 1. In the Claim Mapping Table, the Examiner again cites this portion of Vieregge as support for the Examiner's assertion that Vieregge discloses the limitations of Appellant's claim 1 which were argued by Appellant's in the Appeal Brief. Thus, Appellant submits that, since Appellant has previously addressed these portions of Vieregge in the Appeal Brief, and no further arguments are put forth by the Examiner in the claim mapping table, no additional response is required from the Appellant.

Examiner's Remark "A" on Claim Mapping Table (Reply Brief, Pg. 9)

In Remark A, the Examiner states that "Vieregge et al. teaches in col. 5, lines 9-10 that the predictor block 22 make a decision whether a failure is likely to occur. A decision that a

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failure is likely to occur implies that the BER values worsen over time.” (Examiner’s Answer, Pg. 10). Appellant disagrees.

First, Appellant submits that a general statement that a decision is made as to whether a failure is likely to occur, as disclosed in Vieregge, clearly does not teach or suggest the specific limitation of “in response to a determination that each of said recent ones of said collected BER values exceeds the predetermined BER threshold level, determining whether said collected BER values worsen over time,” as claimed in Appellant’s claim 1. There is simply no basis for the Examiner’s assertion that this general statement of Vieregge discloses or suggests this specific limitation of Appellant’s claim 1. Thus, at least for this reason, Appellant submits that Vieregge fails to teach or suggest the limitation of “in response to a determination that each of said recent ones of said collected BER values exceeds the predetermined BER threshold level, determining whether said collected BER values worsen over time,” as claimed in Appellant’s claim 1.

Second, Appellant submits that a decision that a failure is likely to occur does not imply that BER values worsen over time. Rather, Vieregge clearly discloses other, different, ways in which a decision that a failure is likely to occur may be made. Specifically, Vieregge discloses that the decision that a failure is likely to occur is made using one or both of a comparison of the latest BER value to a threshold and a comparison of the rate of increase of BER to a value. (Vieregge, Col. 5, Lines 49 – 59). Appellant submits that using either of these comparisons as the basis for a decision that a failure is likely to occur may result in a determination that a failure is likely to occur where the BER values are *not* worsening over time. For example, given a BER threshold of 0.03, the two most recently received BER values may indicate BERs of 0.05 and 0.04, such that even though the BER value improved over time (namely, from 0.05 to 0.04) the latest BER value (namely, 0.04) still exceeded the BER threshold (namely, 0.03) such that there is still a decision that a failure is likely to occur. Similarly, for example, given a BER change threshold of 0.02/second, the three most recently received BER values may indicate BERs of 0.05 and 0.02 and 0.10, such that even though the BER value improved during that time (namely, from 0.05 to 0.02), the rate of increase of BER during the two second time period (namely, $(0.10 - 0.05)/2 = 0.025$) still exceeded the BER change threshold (namely, 0.02/second) such that there is still a decision that a failure is likely to occur. In both of these examples, a determination is made that a failure is likely to occur where the BER values are *not* worsening over time. Furthermore, Appellant notes that this also is supported by the example provided by the

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Examiner in the Reply Brief. Namely, viewing the modified version of Figure 3 of Vieregge provided by the Examiner in the Examiner's Answer, Appellant notes that the plotted BER curve may be redrawn such that rather than increasing between t_2 and t_3 , the BER curve decreases between t_2 and t_3 and then continues increasing after t_3 until crossing the BER threshold, such that, even though the BER value improved during that time, there still was ultimately a decision that a failure is likely to occur. Thus, Appellant submits that, at least from these examples, it is clear that a decision that a failure is likely to occur does not imply that BER values worsen over time.

Third, Appellant notes that the Examiner's argument appears to be based on inherency, the Examiner stating that "[a] decision that a failure is likely to occur implies that the BER values worsen over time." (Examiner's Answer, Pg. 9).

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (emphasis added). *See MPEP* § 2112. To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' *In re Robertson*, 169 F.3d 743, 745, 49 USPQ.2d 1949, 1950-51 (Fed. Cir. 1999). *See id.*

Vieregge does not imply or inherently teach that determining whether a failure is likely to occur involves determining whether collected BER values worsen over time in response to a determination that each of recent ones of the collected BER values exceeds the predetermined BER threshold level, because Vieregge does not necessarily require that determining whether a failure is likely to occur involves determining whether collected BER values worsen over time in response to a determination that each of recent ones of the collected BER values exceeds the predetermined BER threshold level. Similarly, Vieregge does not inherently teach that determining whether a failure is likely to occur implies that collected BER values worsen over time, because Vieregge does not necessarily require that determining whether a failure is likely to occur involves implies that collected BER values worsen over time. Indeed, Vieregge discloses a different manner in which a determination is made as to whether a failure is likely to

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occur. Thus, the Examiner's argument deals in probabilities and possibilities, which are insufficient to establish inherency. Robertson, 49 USPQ2d at 1950.

As such, Vieregge fails to inherently teach or suggest at least the limitation of "in response to a determination that each of said recent ones of said collected BER values exceeds the predetermined BER threshold level, determining whether said collected BER values worsen over time," as claimed in Appellant's claim 1.

Therefore, at least for these reasons, Appellant submits that Examiner's Remark "A" fails to provide any additional arguments which may form the basis for maintaining the rejection of Appellant's claim 1 and, thus, that the rejection of Appellant's claim 1 should be withdrawn.

Examiner's Remark "B" on Claim Mapping Table (Examiner's Answer, Pgs. 10-11)

In Remark B, the Examiner states that Vieregge discloses an embodiment in which BER values are stored in memory. (Examiner's Answer, Pg. 11).

In response, Appellant notes that, although the cited portion of Vieregge discusses storing BER values in memory, the cited portion of Vieregge, like other portions of Vieregge, indicates that switching to a protection path is based on a comparison of a predicted BER to a predetermined threshold value, not based on a determination as to whether BER values worsen over time as claimed in Appellant's claim 1. Thus, irrespective of the Examiner's assertions regarding storage of BER values, Vieregge still fails to teach or suggest at least the limitation of "in response to a determination that each of said recent ones of said collected BER values exceeds the predetermined BER threshold level, determining whether said collected BER values worsen over time," as claimed in Appellant's claim 1.

Examiner's Arguments for Pg. 13-14 of Appeal Brief (Examiner's Answer, Pg. 11-13)

In this portion of the Examiner's Answer, the Examiner disagrees with the portion of Appellant's arguments quoted by the Examiner. The Examiner cites a specific portion of Vieregge which states that "...the failure predictor could require that in addition to the latest BER exceeding the threshold IBr, a rate of increase must also exceed some value indicating that a failure is likely." (Examiner's Answer, Pg. 12, quoting Vieregge Col. 5, Lines 53-57).

In response, Appellant notes that the Examiner has failed to fully address Appellant's arguments. Namely, the Examiner merely focuses on the "worsen over time" portion of the

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analyzing step of Appellant's claim 1, without addressing Appellant's arguments with respect to other portions of the analyzing step of Appellant's claim 1.

As noted in Appellant's Appeal Brief, Vieregge does not teach or suggest (a) comparing each of a plurality of recent ones of collected BER values to a predetermined BER threshold level, (b) determining whether the recent ones of the collected BER values exceed a predetermined BER threshold level, or (c) in response to a determination that each of the recent ones of the collected BER values exceeds the predetermined BER threshold level, determining whether collected BER values (of which the recent BER values are a subset) worsen over time, as claimed in Appellant's claim 1.

Rather, Vieregge merely discloses that the decision that a failure is likely to occur is made using one or both of (a) a comparison of the latest BER value to a threshold and (2) a comparison of the rate of increase of BER to a value. (Vieregge, Col. 5, Lines 49 – 59).

First, Appellant notes that Vieregge merely discloses comparing a single BER value (namely, a latest BER value) to a threshold, not comparing each of a plurality of recent ones collected BER values to a threshold.

Second, Appellant notes that although Vieregge discloses that the decision that a failure is likely to occur may be made using a comparison of the rate of increase of BER to a value where the rate of increase of BER is determined using two BER values, Vieregge does not teach or suggest comparing each of a plurality of recent ones collected BER values to a threshold. Rather, Vieregge only discloses comparing a single BER value (namely, a latest BER value) to a threshold or comparing a single BER rate change value to a threshold.

Third, Appellant notes that, even assuming *arguendo* that the rate of increase teachings of Vieregge could be interpreted as disclosing the “worsen over time” portion of the analyzing step of Appellant's claim 1, Vieregge merely indicates that comparison of the latest BER value to the threshold and comparison of the rate of increase of BER to a value are used together, not that performing one is based on the result of the other. More specifically, Vieregge is devoid of any teaching or suggestion that comparing the rate of increase of BER to a value is performed in response to a determination that the latest BER value exceeds a threshold and, thus, even assuming *arguendo* that the rate of increase teachings of Vieregge could be interpreted as disclosing the “worsen over time” portion of the analyzing step of Appellant's claim 1, Vieregge still would fail to teach or suggest determining whether collected BER values (of which the

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recent BER values are a subset) worsen over time in response to a determination that each of the recent ones of the collected BER values exceeds the predetermined BER threshold level, as claimed in Appellant's claim 1.

Thus, at least for these reasons, Vieregge fails to teach or suggest comparing each of a plurality of recent ones of collected BER values to a predetermined BER threshold level, determining whether the recent ones of the collected BER values exceed a predetermined BER threshold level, and, in response to a determination that each of the recent ones of the collected BER values exceeds the predetermined BER threshold level, determining whether collected BER values (of which recent BER values are a subset) worsen over time, as recited in Appellant's claim 1.

Examiner's Arguments for Pg. 15 of Appeal Brief (Examiner's Answer, Pgs. 13-15)

In this portion of the Examiner's Answer, the Examiner quotes a large portion of the Appellant's arguments from the Appeal Brief. The Examiner, however, rather than responding to the Appellant's arguments, merely asserts that Appellant is arguing limitations not included in Appellant's claim 1. More specifically, the Examiner argues that the FLAG counter referenced in the quoted portion of Appellant's Appeal Brief is not included in Appellant's claim 1. (Examiner's Answer, Pg. 15).

In response, Appellant submits that the Examiner has failed to respond to Appellant's arguments. Rather, instead of responding to the substance of Appellant's arguments, the Examiner instead selects one sentence from an entire page of arguments in order to assert that that Appellant is arguing limitations not included in Appellant's claim 1. Appellant provided the references to the FLAG counter in the quoted portion of the Appeal Brief for purposes of ensuring an understanding of certain limitations of Appellant's claim 1. Appellant never asserted in the Appeal Brief that the FLAG counter is not taught or suggested by Vieregge. Similarly, Appellant never asserted in the Appeal Brief that the FLAG counter is what distinguishes Appellant's claim 1 from Vieregge. Rather, as noted hereinabove, Appellant merely cited portions of Appellant's specification in an attempt to provide a better understanding of certain limitations of Appellant's claim 1. Thus, the Examiner's assertion that limitations from the specification are not read into the claims is inappropriate and, further, does not address the Appellant's arguments explaining why Vieregge fails to teach or suggest determining whether a

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set of collected BER values worsen over time, in response to a determination that each of a plurality of BER values in a subset of that set of collected BER values exceeds a BER threshold, as claimed in Appellant's claim 1.

Examiner's Arguments for Pg. 16 of Appeal Brief (Examiner's Answer, Pgs. 15-17)

In this portion of the Examiner's Answer, the Examiner asserts that the fact that the failure predictor of Vieregge decides to switch over "...implies that the failure predictor determines that BER worsen over time; otherwise why bother to switchover." (Examiner's Answer, Pg. 16-17). Appellant respectfully disagrees.

In response, Appellant submits that a decision by a failure predictor to switch to a protection line in no way implies the basis for initiating the switch to the protection line and, further, that the Appellant is confused by the second portion of the Examiner's statement because there is simply no relationship between "bother[ing] to switchover" and the basis for initiating switchover.

In this portion of the Examiner's Answer, the Examiner further asserts that "...the cited portion Vieregge et al. reads on the limitations." (Examiner's Answer, Pg. 17).

In response, Appellant notes that the Examiner fails to respond to any of the Appellant's arguments from the corresponding portion of the Appeal Brief. Rather, the Examiner merely makes a conclusory statement which cannot serve as a basis for maintaining the rejection of Appellant's claim 1.

Examiner's Arguments for Pg. 16 of Appeal Brief (Examiner's Answer, Pgs. 17-19)

In this portion of the Examiner's Answer, the Examiner asserts that "...Appellant's argument amounts to a general allegation that the reference does not teach the claimed limitations without specifically pointing out how the language of the claims distinguishes them from the reference." (Examiner's Answer, Pgs. 18 – 19).

In response, Appellant submits that Appellant clearly has distinguished Appellant's claim 1 from the teachings of Vieregge. Appellant clearly did this in both the Appeal Brief and in this Reply Brief. The Examiner's assertion that Appellant's argument amounts to a "general allegation" is based on a single sentence in Appellant's Appeal Brief. Furthermore, the portion of the Appeal Brief cited by the Examiner is a portion in which Appellant shows that the

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Examiner's rejection is deficient because the Examiner's rejection fails to address the specific language of Appellant's claim 1, not the portion in which Appellant explains the differences between Appellant's claim 1 and the teachings of Vieregge. Thus, the Examiner's assertion that Appellant's argument amounts to a "general allegation" does not even apply here. Moreover, like in other portions of the Examiner's Answer, the Examiner's response to the quoted portion of the Appeal Brief fails to address the actual arguments provided by the Appellant (namely, the Examiner does not respond to Appellant's statements explaining that the Examiner's rejection fails to address the specific language of Appellant's claim 1).

Conclusion

Therefore, at least for these reasons, as well as the reasons provided in Appellant's Appeal Brief, Appellant respectfully submits that the rejection of Appellant's independent claims 1 and 22 under 35 U.S.C. §102 should be withdrawn. Furthermore, at least for these reasons, Appellant submits that the rejection of Appellant's associated dependent claims also should be withdrawn.

Response to Examiner's Arguments: Claims 20 – 21 (Pgs. 19 – 29 of Examiner's Answer)

In responding to Appellant's arguments regarding claims 20 and 21, the Examiner makes additional arguments and remarks. The Examiner's arguments and remarks are addressed in turn hereinbelow.

Examiner's Arguments for Pg. 28 of Appeal Brief (Examiner's Answer, Pgs. 20-23)

In this portion of the Examiner's Answer, the Examiner provides background information indicating the manner in which Li defines span switch and ring switch operations.

In this portion of the Examiner's Answer, the Examiner then asserts that Appellant admits that the combination of Li and Ryhorchuk discloses presence of in-band and out-of-band signals within the same system, and concludes that Appellant admits that a combination of Li and Ryhorchuk discloses the limitations of "transmitting an in-band signal via a first optical channel towards a multiplexer" and "transmitting an out-of-band signal via a second optical channel towards said multiplexer" of Appellant's claim 20. Appellant respectfully disagrees.

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In response, Appellant submits that, even assuming *arguendo* that Appellant may be held to have admitted that the combination of Li and Ryhorchuk discloses presence of in-band and out-of-band signals within the same system, such an admission clearly is not an admission that the combination of Li and Ryhorchuk discloses the more specific limitations of “transmitting an in-band signal via a first optical channel towards a multiplexer” or “transmitting an out-of-band signal via a second optical channel towards said multiplexer,” as recited in Appellant’s claim 20. Thus, there is no basis for the Examiner’s conclusion regarding what the Examiner asserts to be an admission by the Appellant.

In this portion of the Examiner’s Answer, the Examiner then asserts that “...Ryhorchuk et al. teaches in Table 1, column 3 (col. 14, lines 25-30) that (1) if no OSC signal, initiate ring switch; or (2) if OSC signal present, do not initiate ring switch, i.e., initiate a span switch instead.” (Examiner’s Answer, Pg. 23, Emphasis added).

In response, Appellant notes that the portion of the Examiner’s statement which states “i.e., initiate a span switch instead” is not included in the cited portion of Ryhorchuk. Rather, the Examiner simply interprets the statement in Ryhorchuk that a ring switch is not initiated to be an indication that a span switch is initiated. However, there is simply no support in Ryhorchuk for the Examiner’s interpretation. A statement of “do not initiate ring switch”, as disclosed in the cited portion of Ryhorchuk, does not teach or suggest that a different type of switching operation is performed, much less that a span switch is initiated. Rather, it simply means that a ring switch is not initiated. Thus, the Examiner impermissibly attributes to Ryhorchuk teachings which clearly are not present in Ryhorchuk in an attempt to meet the language of Appellant’s claim 20.

In this portion of the Examiner’s Answer, the Examiner further asserts that “[t]he working channel, the OSC channel and the protection channel correspond to the first optical channel, the second optical channel and the third optical channel, respectively, in claim 20” and concludes that “...the combination of Li and Ryhorchuk teaches the rest of the limitations in claim 20.” (Examiner’s Answer, Pg. 23, Emphasis added).

In response, Appellant notes that the Examiner has failed to explain how mapping the working channel, the OSC channel, and the protection channel of Li and Ryhorchuk to the first optical channel, the second optical channel, and the third optical channel of Appellant’s claim 20 indicates that a combination of Li and Ryhorchuk meets the limitations of Appellant’s claim 20.

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Rather, the Examiner merely makes a conclusory statement that “the combination of Li and Ryhorchuk teaches the rest of the limitations in claim 20” without any explanation in support of this conclusory statement.

Further in response, as indicated in Appellant’s Appeal Brief, Appellant maintains that, although Ryhorchuk discloses an optical supervisory channel, Ryhorchuk merely states that the each node receives status information from upstream nodes via the optical supervisory channel, and that the status information includes information that at least one upstream controller has measured or otherwise collected regarding the status of the network channels. (Ryhorchuk, Col. 8, Lines 46 – 50). Ryhorchuk is devoid of any teaching or suggestion that the optical supervisory channel is used in the same manner as the out-of-band signal of the second optical channel of Appellant’s claim 20. More specifically, Ryhorchuk does not disclose use of the optical supervisory channel in combination with an in-band signal to determine whether a span switch or ring switch operation is performed to switch an in-band signal to another optical channel. The Examiner has failed to address this argument. The Examiner has failed to cite any portion of Li and/or Ryhorchuk which may be used to show that a combination of Li and Ryhorchuk discloses use of the optical supervisory channel in combination with an in-band signal to determine whether a span switch or ring switch operation is performed to switch an in-band signal to another optical channel. Rather, as noted above, the Examiner merely makes a general statement mapping the working channel, the OSC channel, and the protection channel of Li and Ryhorchuk to the first optical channel, the second optical channel, and the third optical channel of Appellant’s claim 20, without citing any portion of Li or Ryhorchuk which teaches or suggests use of the working channel, the OSC channel, and the protection channel of Li and Ryhorchuk in the manner claimed in Appellant’s claim 20. Thus, the rejection of Appellant’s claim 20 on this basis cannot be maintained.

Examiner’s Arguments for Pg. 29 of Appeal Brief (Examiner’s Answer, Pgs. 23-25)

In this portion of the Examiner’s Answer, the Examiner concludes that “...it does not matter whether a channel is a payload channel or a supervisory channel, as long as there are failures on multiple channels, a ring switch should be initiated and if only one channel fails, a span switch should be performed.” (Examiner’s Answer, Pgs. 24 – 25).

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In response, Appellant submits that the Examiner fails to establish a *prima facie* case of obviousness of Appellant's claim 20, because the Examiner fails to consider all of the word in Appellant's claim 20 in judging the patentability of Appellant's claim 20.

According to MPEP §2143.03: "[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art" (*quoting, In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)).

Appellant's claim 20 includes limitations of "in response to detection of a condition on said first optical channel without detection of a condition on said second optical channel, switching the in-band signal to a third optical channel using a span switch operation" and "in response to detection of a condition on said first optical channel and detection of a condition on said second optical, switching the in-band signal to a third optical channel using a ring switch operation" and, thus, in order to establish a *prima facie* of obviousness of Appellant's claim 20, the Examiner is required to consider each of these words of Appellant's claim 20 and to show that a combination of Li and Ryhorchuk discloses or suggests these limitations of Appellant's claim 20.

In the cited portion of the Examiner's Answer, however, rather than addressing the specific limitations of Appellant's claim 20, the Examiner merely relies upon generalizations regarding span and ring switch operations in order to assert that a combination of Li and Ryhorchuk discloses the limitations of Appellant's claim 20. Namely, as indicated hereinabove, the Examiner states that "...it does not matter whether a channel is a payload channel or a supervisory channel, as long as there are failures on multiple channels, a ring switch should be initiated and if only one channel fails, a span switch should be performed." (Examiner's Answer, Pgs. 24 – 25). Appellant notes that Appellant's claim 20 includes limitations more specific than merely indicating that if there are failures on multiple channels then a ring switch should be initiated and if there is a failure on only one channel then a span switch should be performed. The Examiner's generalizations fail to address the specific limitations of Appellant's claim 20 and, therefore, cannot serve as a basis for maintaining the rejection of Appellant's claim 20. The Examiner appears to fail to consider the specific words of Appellant's claim 20 in judging the patentability of Appellant's claim 20.

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Thus, Appellant submits that the Examiner fails to establish a *prima facie* case of obviousness of Appellant's claim 20, because the Examiner fails to consider all of the word in Appellant's claim 20 in judging the patentability of Appellant's claim 20.

Examiner's Arguments for Pg. 30 of Appeal Brief (Examiner's Answer, Pgs. 25-26)

In this portion of the Examiner's Answer, the Examiner "...remarks that neither Li nor Ryhorchuk et al. is relied upon for rejecting claim 1, therefore, whether Li or Ryhorchuk et al. disclose the arrangement of claim 1 or not is irrelevant to the patentability of claim 1." (Examiner's Answer, Pg. 26).

In response, Appellant submits that the reference to Appellant's claim 1 in the cited portion of the Appeal Brief clearly is a typographical error. This is clear from the fact that every other reference to a claim in the cited paragraph is a reference to Appellant's claim 20. Appellant notes that, again, as in other portions of the Examiner's Answer, the Examiner fails to address the substance of Appellant's arguments and, rather, merely points out what is obviously a typographical error.

Examiner's Arguments for Pg. 30 of Appeal Brief (Examiner's Answer, Pgs. 26-27)

In this portion of the Examiner's Answer, the Examiner asserts that Appellant's argument is not persuasive, and again provides arguments regarding the portion of Ryhorchuk which states "if no OSC signal, initiate ring switch; or if OSC signal present, do not initiate ring switch." (Examiner's Answer, Pg. 27).

In response, Appellant notes that this argument has been addressed hereinabove with respect to the Examiner's Arguments for Pg. 28 of Appeal Brief and, thus, Appellant's response is not repeated here.

Examiner's Arguments for Pg. 32 of Appeal Brief (Examiner's Answer, Pgs. 27-28)

In this portion of the Examiner's Answer, the Examiner asserts that a combination of Li and Ryhorchuk discloses the limitations of "transmitting an in-band signal via a first optical channel towards a multiplexer" and "transmitting an out-of-band signal via a second optical channel towards said multiplexer" that are recited in Appellant's claim 20. Appellant respectfully disagrees.

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In response, Appellant notes that the Examiner merely cites general portions of Li and Ryhorchuk which disclose multiplexing of wavelength channels. However, a general indication that wavelength channels may be multiplexed, as relied upon by the Examiner, does not teach or suggest the more specific limitations of transmitting an in-band signal via a first optical channel towards a multiplexer and transmitting an out-of-band signal via a second optical channel towards the same multiplexer, as recited in Appellant's claim 20. In other words, even assuming *arguendo* that the cited portions of Li and Ryhorchuk disclose the general concept of multiplexing wavelength channels does not necessarily mean that a combination of Li and Ryhorchuk discloses the specific arrangement of Appellant's claim 20 in which an in-band signal is transmitted via a first optical channel towards a multiplexer and an out-of-band signal is transmitted via a second optical channel towards the same multiplexer. Thus, the Examiner has failed to establish that Li and Ryhorchuk disclose limitations of transmitting an in-band signal via a first optical channel towards a multiplexer and transmitting an out-of-band signal via a second optical channel towards the same multiplexer, as recited in Appellant's claim 20.

In this portion of the Examiner's Answer, the Examiner further asserts that "...the instant application does not disclose any special multiplexer or solving a problem related to multiplexing wavelength channels. The use of a multiplexer for multiplexing two channels does not differentiate the claimed invention from the combination of Li and Ryhorchuk et al." (Examiner's Answer, Pg. 28).

In response, Appellant submits that it does not matter whether or not Appellant's application discloses a special multiplexer or solving a problem related to multiplexing wavelength channels. According to MPEP §2143.03: "[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art" (*quoting, In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)). Appellant's claim 20 includes limitations reciting "transmitting an in-band signal via a first optical channel towards a multiplexer" and "transmitting an out-of-band signal via a second optical channel towards said multiplexer" and, thus, the Examiner is required to show that a combination of Li and Ryhorchuk discloses these limitations. The Examiner simply cannot fail to give these limitations patentable weight based on the Examiner's opinion that Appellant's application fails to disclose a special multiplexer or solving a problem related to multiplexing wavelength channel. Thus, the Examiner's failure to

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give these limitations patentable weight is improper and cannot support a rejection of Appellant's claim 20.

Examiner's Arguments for Pg. 32 of Appeal Brief (Examiner's Answer, Pgs. 28-29)

In this portion of the Examiner's Answer, the Examiner merely addresses Appellant's conclusion by restating arguments provided by the Examiner in the Examiner's Answer. (Examiner's Answer, Pg. 28).

In response, Appellant notes that these arguments have been addressed hereinabove with respect to other sections of the Examiner's Response to Arguments of the Appeal Brief and, thus, Appellant's responses are not repeated here.

Conclusion

Therefore, at least for these reasons, as well as the reasons provided in Appellant's Appeal Brief, Appellant respectfully submits that the rejection of Appellant's independent claim 20 under 35 U.S.C. § 103 should be withdrawn. Furthermore, at least for these reasons, Appellant submits that the rejection of Appellant's associated dependent claim 21 also should be withdrawn.

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CONCLUSION

Appellant respectfully requests that the Board reverse the rejections and pass the claims to allowance.

Respectfully submitted,



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